Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A fuse cell comprising:

an input terminal for receiving an input signal;

an output terminal;

a control circuit coupled to the input terminal;

an initialization circuit coupled to the control circuit;

a fuse circuit coupled to the control circuit, the fuse circuit comprises a fuse having an uncut or a cut fuse state;

a latch coupled to the output terminal and the control circuit, the latch stores information indicative of the fuse state; and

in response to an input signal at the input terminal, the control circuit causes the fuse cell to operate in ~~the~~ an initialization mode by coupling the initialization circuit to the latch or to operate in a normal mode by coupling the fuse circuit to the latch, wherein the latch, depending on the state of the fuse, remains in ~~the~~ a first state or switches to ~~the~~ a second state.

2. (new) A fuse cell comprising:

an input terminal for receiving an input signal;

an output terminal for generating an output signal;

a control circuit coupled to the input terminal;

a latch coupled to the output terminal and the control circuit, the latch having first and second latch states;

an initialization circuit coupled to the control circuit, the initialization circuit initializes the latch to the first latch state when activated;

a fuse circuit coupled to the control circuit, the fuse circuit comprises a fuse having an uncut or a cut fuse state; and

in response to an input signal at the input terminal, the control circuit causes the fuse cell to operate in either an initialization mode or a normal mode, wherein in the normal mode, the latch is either in a first or a second latch state depending on the fuse state, causing the output signal at the output terminal to be in a first or a second output signal state to indicate the fuse state.

3. (new) The fuse cell of claim 2 further comprises an output stage coupled to the latch and the output terminal, the output stage stabilizes the output signal.

4. (new) The fuse cell of claim 3 wherein the initialization circuit comprises an initialization reference voltage.

5. (new) The fuse cell of claim 4 wherein the fuse circuit comprises a fuse having first and second terminals, the first terminal coupled to the control circuit and the second terminal coupled to a fuse reference voltage.

6. (new) The fuse cell of claim 4 wherein:

the fuse circuit comprises a fuse having first and second terminals, the first terminal coupled to the control circuit and the second terminal coupled to a fuse reference voltage, and

the fuse reference voltage and the initialization reference voltage are equal to about ground.

7. (new) The fuse cell of claim 3 wherein the fuse circuit comprises a fuse having first and second terminals, the first terminal coupled to the control circuit and the second terminal coupled to a fuse reference voltage.

8. (new) The fuse cell of claim 2 wherein the initialization circuit comprises an initialization reference voltage.

9. (new) The fuse cell of claim 8 wherein the fuse circuit comprises a fuse having first and second terminals, the first terminal coupled to the control circuit and the second terminal coupled to a fuse reference voltage.

10. (new) The fuse cell of claim 8 wherein:

the fuse circuit comprises a fuse having first and second terminals, the first terminal coupled to the control circuit and the second terminal coupled to a fuse reference voltage, and

the fuse reference voltage and the initialization reference voltage are equal to about ground.

11. (new) The fuse cell of claim 2 wherein the fuse circuit comprises a fuse having first and second terminals, the first terminal coupled to the control circuit and the second terminal coupled to a fuse reference voltage.

12. (new) The fuse cell of claim 2 wherein the control circuit comprises a fuse switch for selectively coupling or decoupling the fuse circuit to the latch in the normal mode or in the initialization mode.

13. (new) The fuse cell of claim 12 wherein the control circuit comprises an initialization switch, the initialization switch selectively coupling or decoupling the initialization circuit to the latch in the initialization mode or in the normal mode.

14. (new) The fuse cell of claim 13 wherein the initialization switch and the fuse switch operate in a push-pull configuration.

15. (new) The fuse cell of claim 13 wherein at least one of the initialization switch or fuse switch comprises a transistor and the initialization switch and fuse switch operate in a push-pull configuration.

16. (new) The fuse cell of claim 12 wherein the fuse switch comprises a transistor.

17. (new) The fuse cell of claim 2 wherein the control circuit comprises an initialization switch, the initialization switch selectively coupling or decoupling the initialization circuit to the latch in the initialization mode or in the normal mode.

18. (new) A fuse cell comprising:

an input terminal for receiving an input signal;

an output terminal for generating an output signal;

a control circuit coupled to the input terminal;

a latch coupled to the output terminal and the control circuit, the latch having first and second latch states;

a fuse circuit coupled to the control circuit, the fuse circuit comprises a fuse having an uncut or a cut fuse state; and

in response to an input signal at the input terminal, the control circuit causes the fuse cell to operate in either an initialization mode or a normal mode, wherein in the normal mode, the latch is either in a first or a second latch state depending on the fuse state, causing the output signal at the output terminal to be in a first or a second output signal state to indicate the fuse state.